

PCNA
Rabbit Monoclonal antibody(Mab)
Catalog # AD80035

Specification

PCNA - Product info

Application	IHC-P, IHC
Primary Accession	P12004
Reactivity	Human
Host	Rabbit
Clonality	Monoclonal
Calculated MW	28769

PCNA - Additional info

Gene ID	5111
Gene Name	PCNA

Other Names
Proliferating cell nuclear antigen, PCNA, Cyclin, PCNA

Dilution

IHC-P~~Ready-to-use
IHC~~Ready-to-use

Storage

Maintain refrigerated at 2-8°C

Precautions

PCNA Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

PCNA - Protein Information

Name PCNA

Function

Auxiliary protein of DNA polymerase delta and is involved in the control of eukaryotic DNA replication by increasing the polymerase's processibility during elongation of the leading strand. Induces a robust stimulatory effect on the 3'- 5' exonuclease and 3'-phosphodiesterase, but not apurinic- apyrimidinic (AP) endonuclease, APEX2 activities. Has to be loaded onto DNA in order to be able to stimulate APEX2. Plays a key role in DNA damage response (DDR) by being conveniently positioned at the replication fork to coordinate DNA replication with

Cellular Location

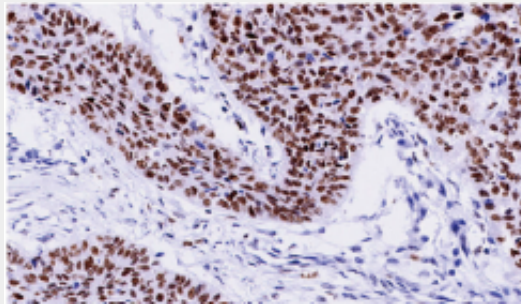
DNA repair and DNA damage tolerance pathways (PubMed:[24939902](#)). Acts as a loading platform to recruit DDR proteins that allow completion of DNA replication after DNA damage and promote postreplication repair: Monoubiquitinated PCNA leads to recruitment of translesion (TLS) polymerases, while 'Lys-63'-linked polyubiquitination of PCNA is involved in error-free pathway and employs recombination mechanisms to synthesize across the lesion (PubMed:[24695737](#)). Nucleus. Note=Colocalizes with CREBBP, EP300 and POLD1 to sites of DNA damage (PubMed:[24939902](#)). Forms nuclear foci representing sites of ongoing DNA replication and vary in morphology and number during S phase. Together with APEX2, is redistributed in discrete nuclear foci in presence of oxidative DNA damaging agents.

PCNA - Protocols

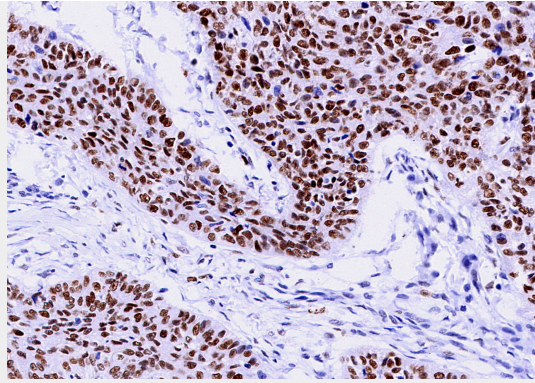
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

PCNA - Images



Lung squamous cell carcinoma



Immunohistochemical analysis of paraffin-embedded papillary thyroid carcinoma; tissue using AD80035 performed on the Abcarta® FAIP-30 Fully automated IHC platform. Tissue was fixed with formaldehyde at room temperature, antigen retrieval was by heat mediation with a EDTA buffer (pH 9.0). Samples were incubated with primary antibody (Ready-to-use) for 15 min at room temperature. AmpSee™ Detection Systems [Abcepta:AR005] was used as the secondary antibody.